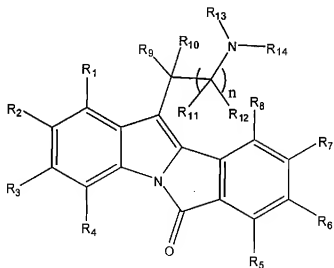


AMENDMENTS TO THE CLAIMS

- I. (Currently amended) A compound of the general formula (I),



General Formula (I)

its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts and solvates,

wherein R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₈, R₉, R₁₀, R₁₁ and R₁₂ ~~may be~~ are the same or different and are each independently represent selected from the group consisting of hydrogen, halogen, perhaloalkyl, substituted or unsubstituted ~~groups such as~~ linear or branched (C₁-C₃)alkyl, (C₃-C₇)cycloalkyl, (C₁-C₃)alkoxy, cyclo(C₃-C₇)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, ~~heterocyclyl~~, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, and sulfonic acids ~~and its derivatives~~,

R₁₃ and R₁₄ ~~may be~~ are the same or different and are each independently represents selected from the group consisting of hydrogen, substituted or unsubstituted ~~groups such as~~ linear or branched (C₁-C₃)alkyl, and (C₃-C₇)cycloalkyl, ~~optionally or~~ along taken together with the nitrogen atom to which they are attached, ~~may form a 6 or 7- membered~~

heterocyclic ring, wherein the ring ~~may be further~~ is unsubstituted or substituted, and ~~it may have either optionally contains~~ one, two or three double bonds or ~~"additional heteroatoms", as defined above. heteroatoms; and~~

~~"n"~~ n is an integer ranging from 1 to 2. ~~It is preferred that n be 1.~~

2. (Original) A compound according to Claim-1, which is selected from the group consisting of:

11-(2-N,N-Dimethylaminoethyl)isoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-2-fluoroisoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-2-fluoroisoindolo[2,1-a]indol-6-one hydrochloride salt;
11-[(2-N,N-Dimethylamino)ethyl]-2-fluoroisoindolo[2,1-a]indol-6-one maleic acid salt;
11-[(2-N,N-Dimethylamino)ethyl]-2-fluoroisoindolo[2,1-a]indol-6-one D,L-malic acid salt;
11-[(2-N,N-Dimethylamino)ethyl]-2-fluoroisoindolo[2,1-a]indol-6-one oxalate salt;
11-[(2-N,N-Dimethylamino)ethyl]-2-fluoroisoindolo[2,1-a]indol-6-one citrate salt;
11-[(2-N-cyclopropyl-N-methylamino)ethyl]-2-fluoroisoindolo[2,1-a]indol-6-one;
11-[2-N-cyclopropylaminoethyl]-2-fluoroisoindolo[2,1-a]indol-6-one;
2-Bromo-11-[(2-N,N-dimethylamino)ethyl]isoindolo[2,1-a]indol-6-one;
2-Chloro-11-[(2-N,N-dimethylamino)ethyl]isoindolo[2,1-a]indol-6-one;
4-Chloro-11-[(2-N,N-dimethylamino)ethyl]isoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-2-methylisoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-2-methoxyisoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-4-methoxyisoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-4-trifluoromethylisoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-4-ethylisoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-2,4-difluoroisoindolo[2,1-a]indol-6-one;
2,4-Dichloro-11-[(2-N,N-dimethylamino)ethyl]isoindolo[2,1-a]indol-6-one;
3,4-Dichloro-11-[(2-N,N-dimethylamino)ethyl]isoindolo[2,1-a]indol-6-one;
1,2,4-Trichloro-11-[(2-N,N-dimethylamino)ethyl]isoindolo[2,1-a]indol-6-one;
11-[(2-N,N-Dimethylamino)ethyl]-2,4-dimethylisoindolo[2,1-a]indol-6-one;

- 11-[(2-N,N-Dimethylamino)ethyl]-3,4-dimethylisoindolo[2,1-a]indol-6-one;
- 1-Chloro-11-[(2-N,N-dimethylamino)ethyl]-4-methylisoindolo[2,1-a]indol-6-one;
- 3-Chloro-11-[(2-N,N-dimethyl-N-acetylamino)ethyl]-4-methylisoindolo[2,1-a]indol-6-one;
- 11-[(2-N,N-Dimethylamino)propyl]-4-methylisoindolo[2,1-a]indol-6-one;
- 3-Chloro-11-[(2-N-methylamino)ethyl]-4-methylisoindolo[2,1-a]indol-6-one;
- 3-Chloro-11-[(2-N-methyl-N-acetylamino)ethyl]-4-methylisoindolo[2,1-a]indol-6-one;
- 3-Chloro-11-[(2-N-methylamino)ethyl]-2-methoxyisoindolo[2,1-a]indol-6-one;
- 3-Chloro-11-[(2-N-methylamino)ethyl]-2-sulfoamidoisoindolo[2,1-a]indol-6-one;
- 3-Iodo-11-[(2-N-methylamino)ethyl]-2-methoxyisoindolo[2,1-a]indol-6-one;
- 2-Bromo-11-[(2-morpholin-1-yl)ethyl]isoindolo[2,1-a]indol-6-one;
- 2-Bromo-11-[2-(4-methylpiperazin-1-yl)ethyl]isoindolo[2,1-a]indol-6-one;

and its stereoisomers, its N-oxides, its polymorphs, its pharmaceutically acceptable salts and solvates.

3. (Currently amended) A pharmaceutical composition comprising ~~either of a~~ pharmaceutically acceptable carrier, ~~diluent/s, excipient/s or solvates along with~~ diluent or excipient ~~and~~ a therapeutically effective amount of a compound according to ~~Claim-1~~ claim 1, its tautomeric forms, its stereoisomers, its geometric forms, its N-oxides, its polymorphs, its pharmaceutically acceptable salts, or solvates.

4. (Currently amended) A pharmaceutical composition according to ~~Claim-3~~ claim 3, ~~which is~~ in the form of a tablet, capsule, powder, lozenge, suppository, lozenges, suppositories, syrup, solution, suspension or injectable, wherein said pharmaceutical composition is administered ~~in~~, as a single dose or in multiple dose units.

5. (Original) Use of compound of general formula (I), as defined in Claim-1 or a pharmaceutical composition as defined in Claim-3 for preparing medicaments.

6. (Original) Use of compound of general formula (I), as defined in Claim-1 or a pharmaceutical composition as defined in Claim-9 for the treatment where a modulation of 5-HT activity is desired.
7. (Original) Use of a compound as claimed in Claim-1 for the manufacture of a medicament for the treatment and/or prevention of clinical conditions for which a selective action on 5-HT receptors is indicated.
8. (Original) Use of a compound as claimed in Claim-1 for the treatment and/or prevention of clinical conditions such as anxiety, depression, convulsive disorders, obsessive-compulsive disorders, migraine headache, cognitive memory disorders, ADHD (Attention Deficient Disorder/Hyperactivity Syndrome), personality disorders, psychosis, paraphrenia, psychotic depression, mania, schizophrenia, schizophreniform disorders, withdrawal from drug abuse, panic attacks, sleep disorders and also disorders associated with spinal trauma and/or head injury.
9. (Original) Use of a compound as claimed in Claim-1 for the treatment of mild cognitive impairment and other neurodegenerative disorders like Alzheimer's disease, Parkinsonism and Huntington's chorea.
10. (Original) Use of a compound as claimed in Claim-1 for the treatment of certain GI (Gastrointestinal) disorders such as IBS (Irritable Bowel Syndrome) or chemotherapy induced emesis.
11. (Original) Use of a compound as claimed in Claim-1 to reduce morbidity and mortality associated with the excess weight.
12. (Original) Use of a radiolabelled compound as claimed in Claim-1, as a diagnostic tool for modulating 5-HT receptor function.
13. (Original) Use of a compound as claimed in Claim 1 in combination with a 5-HT re-uptake inhibitor, and/or a pharmaceutically acceptable salt thereof.

14. (Original) A compound of the general formula (I), its tautomeric forms, its stereoisomers, its polymorphs, its pharmaceutically acceptable salts and its pharmaceutically acceptable solvates for preparing a medicament.

15. (Original) A method for the treatment and/or prophylaxis of clinical conditions such as anxiety, convulsive disorders, obsessive-compulsive disorders, migraine headache, cognitive memory disorders, ADHD (Attention Deficient Disorder/Hyperactivity Syndrome), personality disorders, psychosis, paraphrenia, psychotic depression, mania, schizophrenia, schizophreniform disorders, withdrawal from drug abuse, panic attacks, sleep disorders and also disorders associated with spinal trauma and/or head injury which comprises administering to a patient in need thereof, an effective amount of a compound of general formula (I) as claimed in Claim-1.

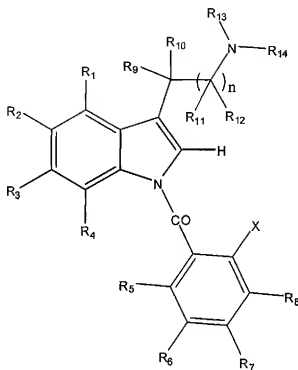
16. (Original) A method for the treatment and/or prophylaxis of mild cognitive impairment and other neurodegenerative disorders like Alzheimer's disease, Parkinsonism and Huntington's chorea which comprises administering to a patient in need thereof, an effective amount of a compound of general formula (I) as claimed in Claim-1.

17. (Original) A method for the treatment of certain GI (Gastrointestinal) disorders such as IBS (Irritable Bowel Syndrome) or chemotherapy induced emesis using a compound of general formula (I) as claimed in Claim-1.

18. (Original) A method to reduce morbidity and mortality associated with the excess weight using a compound of general formula (I) as claimed in Claim-1.

19. (Currently amended) A process for the preparation of a compound according to claim 1 of general formula (I), as defined in Claim 1, which comprises of any one of the following routes comprising a step selected from one of steps i)-iv),

Route i): cyclizing a compound of formula (II) using a Pd(0) or Pd(II) derivative as a catalyst given below,



(II)

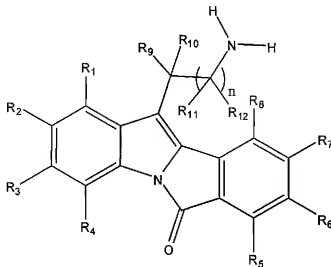
wherein X is halogen such as chloro, bromo or iodo, $R_1, R_2, R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}$ and R_{12}, R_{13}, R_{14} and "n", wherein all the symbols are as defined above,

$R_1, R_2, R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}$ and R_{12} are the same or different and are each independently selected from the group consisting of hydrogen, halogen, perhaloalkyl, substituted or unsubstituted linear or branched (C₁-C₃)alkyl, (C₃-C₇)cycloalkyl, (C₁-C₃)alkoxy, cyclo(C₃-C₇)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, and sulfonic acids;

R_{13} and R_{14} are the same or different and are each independently selected from the group consisting of hydrogen, substituted or unsubstituted linear or branched (C₁-C₃)alkyl, and (C₃-C₇)cycloalkyl, or R_{13} and R_{14} taken together with the nitrogen atom to which they are

attached, form a 6 or 7- membered heterocyclic ring, wherein the ring is unsubstituted or substituted, and optionally contains one, two or three double bonds or heteroatoms; and
n is an integer ranging from 1 to 2 using a Pd(0) or Pd(II) derivative as a catalyst;

Route ii): reacting a compound of formula (III) given below,



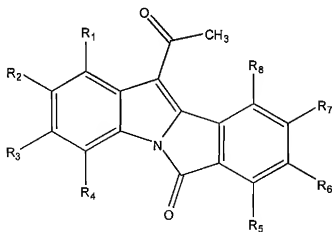
(III)

wherein $R_1, R_2, R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}$ and R_{12} and "n" are as defined above, with a suitable an alkylating agent such as selected from the group consisting of $R_{13} X$ or $R_{14} X$, and or $R_{13}R_{14}X$ either in successive steps or in one step, wherein X is good a leaving group, such as halogen and hydroxyl;

$R_1, R_2, R_3, R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}$ and R_{12} re the same or different and are each independently selected from the group consisting of hydrogen, halogen, perhaloalkyl, substituted or unsubstituted linear or branched (C₁-C₃)alkyl, (C₃-C₇)cycloalkyl, (C₁-C₃)alkoxy, cyclo(C₃-C₇)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, and sulfonic acids; and

n is an integer ranging from 1 to 2;

Route iii): reacting a compound of formula (IV) given below;



(IV)

wherein R₁, R₂, R₃, R₄, R₅, R₆, R₇, and R₈ are ~~as defined above~~ the same or different and are each independently selected from the group consisting of hydrogen, halogen, perhaloalkyl, substituted or unsubstituted linear or branched (C₁-C₃)alkyl, (C₃-C₇)cycloalkyl, (C₁-C₃)alkoxy, cyclo(C₃-C₇)alkoxy, aryl, aryloxy, aralkyl, aralkoxy, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, and sulfonic acids;

with formaldehyde and a compound of formula (V) ~~given below;~~



(V)

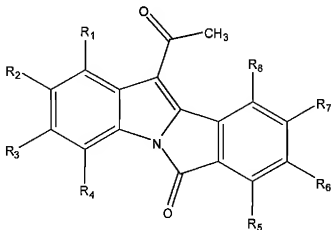
wherein R₁₃ and R₁₄ are ~~as defined above~~ the same or different and are each independently selected from the group consisting of hydrogen, substituted or unsubstituted linear or branched (C₁-C₃)alkyl, and (C₃-C₇)cycloalkyl, or R₁₃, and R₁₄ taken together with the nitrogen atom to which

they are attached, form a 6 or 7- membered heterocyclic ring, wherein the ring is unsubstituted or substituted, and optionally contains one, two or three double bonds or heteroatoms; or

Route iv): either chemically or catalytically reducing ~~compounds~~ a compound of formula (I) containing a $-C(=O)$ group/s in the side chain, to the corresponding $-C(OH,H)$ or $-C(H,H)$ containing compound.

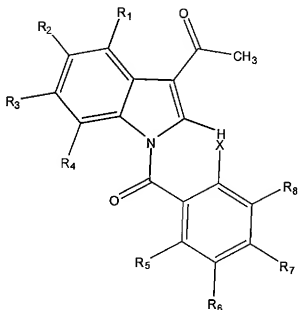
20. (Currently amended) A process according to ~~Claim 19~~ claim 19 further comprising of ~~carrying out~~ one or more of the following ~~optional~~ steps: i) removing ~~any a~~ protecting group; ii) resolving the ~~a~~ racemic mixture into pure enantiomers; ~~by the known methods~~ and iii) preparing a pharmaceutically acceptable salt of ~~a compound of formula (I) and/or iv preparing a pharmaceutically acceptable or prodrug of the compound of formula (I) thereof.~~

21. (Original) Novel intermediates defined of general formula (IV)



wherein R_1 , R_2 , R_3 , R_4 , R_5 , R_6 , R_7 , and R_8 are as may be same or different and each independently represent hydrogen, halogen, perhaloalkyl, substituted or unsubstituted groups such as linear or branched (C_1-C_3) alkyl, (C_3-C_7) cycloalkyl, (C_1-C_3) alkoxy, cyclo (C_3-C_7) alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, acyl, acyloxy, acylamino, monoalkylamino, dialkylamino, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, aralkoxyalkyl, alkylthio, sulfonic acids and its derivatives.

22. (Original) A process provided for the preparation of novel intermediate of the general formula (IV) which comprises of cyclizing compounds of formula (VIII)



(VIII)

wherein, R₁, R₂, R₃, R₄, R₅, R₆, R₇, and R₈ are as defined above; X is halogeno such as chloro, bromo or iodo, using a Pd(0) or Pd (II) derivative as a catalyst.